UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,472	03/16/2004	Joseph J. Kubler	14364US12	1805

23446 7590 05/21/2008
MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER	
PEREZ, JULIO R	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
05/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/801,472	KUBLER ET AL.	
	Examiner	Art Unit	
	JULIO R. PEREZ	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-73* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-73* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/23/07,11/16/06,10/23/06,06/23/06,05/05/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 22, 23, 25, 38-45, 55-58, 63-66, 69, are rejected under 35 U.S.C. 102(a) as being anticipated by Gillig et al. (US005367558A).

Regarding claims 22, 44, Gillig discloses a multi-mode communication device (Figure 1, #10, cellular and cordless telephone) comprising: a first receiver and transmitter for communicating via a first wireless communication network (Figure 2, # 110 shows a transceiver; Rx and Tx; col. 2, lines 50-60, 61-67 – col. 3, lines 1-4, describe the phone, #10, communicating with a cordless base station, # 180, 181, thus communication with a first wireless communication network; i.e., cordless base station); a second receiver and transmitter for communicating via a second wireless communication network (Figure 1, #'s 10, 128; Figure 2, # 's 120, 122, 124 with transceiver to communicate with a cellular system, i.e., Figure 1, #'s 190, 192); and at least one processor communicatively coupled to the first receiver and transmitter and the second receiver and transmitter (Figure 2, #'s 130, microcomputer, i.e., "a processor", connected to transceivers 110 and 120), the at least one processor capable

of establishing the exchange of information via at least one of the first wireless communication network and the second wireless communication network (Figure 2, #'s 110, 120, 130; col. 3, lines 41-59, show the microcomputer operating in accordance to the signals from the cordless or cellular systems, thus receiving either signals from the cellular network or signals from the cordless network).

Further in regards to claim 44, Gillig discloses a housing enclosing at least the first receiver and transmitter or at least the processor (col. 2, lines 50-53, describes the device, # 10 of Figure 1, as a mobile unit installed in carrying case or as a handheld portable device; thus, enclosed in some type of enclosure).

Regarding claims 23, 55, Gillig discloses the device of claim 22 wherein the device further comprises at least one interface capable of accepting and delivering signals representative of voice (Figure 2, # 164; col. 2, lines 61-66, provide the cellular telephone with a microphone, which can accept voice, thus signals representative of voice).

Regarding claims 25, 45, Gillig discloses the device of claim 22 wherein the first wireless communication network comprises a cellular communication network (Figure 1, #'s 190, 192, 194, depict a cellular base station, thus belonging to a cellular network).

Regarding claims 38, 39, Gillig discloses the device of claim 22 wherein the device is capable of directing visual feedback to a user (col. 4, lines 59-66, teach means to visualize operations to the telephone performed on a display, thus, having means to direct visual feedback to a user).

Regarding claims 40, 55, Gillig discloses the device of claim 22 wherein the information comprises voice information (Figure 2, # 164; col. 2, lines 61-66, provide the cellular telephone with a microphone, which can accept voice information).

Regarding claims 41, 56, Gillig discloses the device of claim 22 wherein at least a portion of the information comprises data unrelated to the exchange of voice information (col. 3, lines 48-56, provide information in form of data, which relates to data, other than voice).

Regarding claim 42, Gillig discloses the device of claim 22 wherein the at least one processor automatically routes an outgoing call over one of the first wireless communication network and the second wireless communication network (Figure 5, #'s 402, 410, 404, 406, describe the origination of a call on either cellular or cordless systems).

Regarding claim 43, Gillig discloses the device of claim 42 wherein the at least one processor routes an outgoing call over one of the first wireless communication network and the second wireless communication network based upon the cost of use of a communication network (col. 1, lines 30-39; col. 5, lines 44-66).

Regarding claim 57, Gillig discloses a method of operating a communication device having a plurality of wireless communication interfaces (Figure 1, #'s 10, 118, 128, device with two communication interfaces, i.e., two antennas with different frequency range), the method comprising: detecting an action by a user (col. 4, lines 41-48, shows the user able to initiate a call, thus, an action being detected); determining a type of call based upon the user action (col. 4, lines 41-58; Figures 4, 5, describe the

user initiating a call and the determination of a call via a cordless or cellular system is determined); selecting at least one wireless communication interface from the plurality of wireless communication interfaces based upon the type of cal (Figure 4, #'s 316, 318, 308, 320; Figure 5, #'s 401, 404, 406, 408, 414, 416; col. 4, lines 41-67-col. 5, lines 1-19, providing means to select between a cordless or cellular call); establishing call communication via the at least one wireless communication interface (Figure 6, #'s 500, 502, 504, 506, 508, 510, 512, the call is established based on the preference of network; that is, either cellular or cordless); and exchanging information via the at least one wireless communication interface col. 2, lines 61-67-col. 3, lines 1-17, 41-67-col. 4, lines 41-66).

Regarding claim 58, Gillig discloses claim 57 wherein the plurality of wireless communication interfaces comprises a cellular communication network interface (Figure 1, # 128, includes an antenna for connection to cellular system).

Regarding claim 63, Gillig discloses claim 57 wherein the information exchanged is representative of voice (Figure 2, # 164; col. 2, lines 61-66, provide the cellular telephone with a microphone, which can accept voice information).

Regarding claim 64, Gillig discloses claim 57 wherein at least a portion of the information comprises data unrelated to the establishment or maintenance of voice communication (col. 3, lines 48-56, provide information in form of data, which relates to data, other than voice).

Regarding claim 65, Gillig discloses claim 57 wherein the type of call is one of a voice call, a data call, and a voice and data call (Figure 2, # 164; col. 2, lines 61-66,

provide the cellular telephone with a microphone, which can accept voice, thus signals representative of voice).

Regarding claim 66, Gillig discloses claim 57 wherein the selecting comprises: evaluating a cost of use of a communication network (col. 1, lines 30-39; col. 5, lines 44-66).

Regarding claim 69, Gillig discloses claim 57 wherein action by a user comprises at least one of voice, a key press, and handwriting (col. 4, lines 41-45, the user activates the phone).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Davis et al. (US005453986A).

Regarding claim 24, Gillig discloses the device of claim 23, but wherein the signals representative of voice are digital signals.

Davis discloses connection between a first remote site and local site that operate voice over data communications mode that simultaneously send compressed voice and data (col. 4, lines 65-67 - col. 5, lines 1-8).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that the signals representative of voice are digital signals, to provide mechanisms to transfer digital data over the medium.

5. Claims 26, 27, 46, 47, 59, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Rom. (US 5,515,509).

Regarding claims 26, 46, 27, 47, Gillig discloses the device of claim 22, but wherein the second communication network comprises a wireless local area network or at frequency of about 2.4, GHz.

Rom discloses wherein a network performs functions in relation to wireless LAN scheme, WLAN runs on frequencies of 2.4 GHz range (col. 3, lines 38-51).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that the second communication network comprises a wireless local area networks, to provide an alternative service to a different wireless system for providing different routes or less expensive connections.

Regarding claims 59, 60, Gillig discloses claim 57, but wherein the plurality of wireless communications interfaces comprises a wireless local area network interface or at frequency of about 2.4, GHz.

Rom discloses wherein a network performs functions in relation to wireless LAN scheme, WLAN runs on frequencies of 2.4 GHz range (col. 3, lines 38-51).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that the second communication network comprises a

wireless local area networks, to provide an alternative service to a different wireless system for providing different routes or less expensive connections.

6. Claims 28, 29, 48, 49, 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Antunes et al. (US 5,414,731).

Regarding claims 28, 29, 48, 49, 61, Gillig discloses the device of claim 22, but wherein the second receiver and transmitter communicates via the second wireless communication network using a spread spectrum technique or frequency hopping spread spectrum.

Antunes discloses a system with spread spectrum or frequency hopping schemes (col. 4, lines 31-60).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that the second receiver and transmitter communicates via the second wireless communication network using a spread spectrum technique or frequency hopping spread spectrum, to provide transmission via the system in an efficient and secure manner.

7. Claims 30, 50, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Sonnendorfer et al. (US005406271A).

Regarding claims 30, 50, Gillig discloses the device of claim 22, but one of the first receiver and transmitter and second receiver and transmitter communicates using infrared signals.

Sonnendorfer teaches transmission via infrared signals (Figure 2, #'s 5, 6's, 3, 10; col. 5, lines 46-55).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that the first receiver and transmitter or second receiver and transmitter communicates using infrared signals, to provide transmission via infrared light as a second alternative to a different connection among devices.

8. Claims 31, 32, 51, 52, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Perkins (US005159592A).

Regarding claims 31, 32, 51, 52, 62, Gillig discloses the device of claim 22, but the second receiver and transmitter communicate via the second wireless communication network using an Internet protocol (IP) and wherein the IP is via TCP.

Perkins teaches wireless networks to include WLAN to communicate using internet protocol (abstract, lines 1-10; col. 3, lines 55-67-col. 4, lines 1-20).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that the second receiver and transmitter communicate via the second wireless communication network using an Internet protocol, to provide transmission via the internet as an alternative route.

9. Claims 33, 34, 53, 54, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Allard et al. (US005422656A).

Regarding claims 33, 34, 53, 54, Gillig discloses the device of claim 22, but wherein at least one of the first receiver and transmitter and the second receiver and transmitter is disposed on a user removable circuit card and compliant with PCMCIA.

Allard teaches a cellular phone with mechanisms to accept a PCMCIA card (Figure 2, # 57; col. 3, lines 58-67-col. 4, lines 1-14).

Allard teaches a cellular phone with mechanisms to accept a PCMCIA card, to provide transmission via the internet as an alternative route.

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that at least one of the first receiver and transmitter and the second receiver and transmitter is disposed on a user removable circuit card and compliant with PCMCIA, to provide portability and security to the device.

10. Claims 35, 36, 37, 67, 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Fishbine et al. (US005222152A).

Regarding claims 35, 36, 37, 67, 68, Gillig discloses the device of claim 22, but further comprising at least one image capture device, a thumbprint capture device, or a video capture device.

Fishbine discloses a device that captures images and scans and records fingerprint images and includes video camera (Figure 1, #'s 28, 18, 20; col. 2, lines 64-67-col. 3, lines 1-36).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that at least one image capture device, a thumbprint capture device, or a video capture device be included in the device, to provide means to record images and video of objects as well as fingerprint images.

11. Claim 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig in view of Davis et al. (US005453986A).

Regarding claim 70, Gillig discloses the system supporting communication over a plurality of wireless networks (Figure 1, #'s 190, 180), the system comprising: first

transceiver circuitry adapted for communication via a first wireless communication network (Figure 2, # 110 shows a transceiver; Rx and Tx; col. 2, lines 50-60, 61-67 – col. 3, lines 1-4, describe the phone, #10, communicating with a cordless base station, # 180, 181, thus communication with a first wireless communication network; i.e., cordless base station);; second transceiver circuitry adapted for communication via a second wireless communication network (Figure 1, #'s 10, 128; Figure 2, # 's 120, 122, 124 with transceiver to communicate with a cellular system, i.e., Figure 1, #'s 190, 192); and a processing circuit for managing operation of the transceiver circuitry in order to establish voice communication via at least one of the first and second wireless communication networks (Figure 2, #'s 130, microcomputer, i.e., "a processor", connected to transceivers 110 and 120), the processing circuit selecting one of the first and second wireless communication networks based upon at least one of a mode of communication and a cost of use of a communication network (Figure 6, #'s 500, 502, 504, 506, 508, 510, 512, the call is established based on the preference of network; that is, either cellular or cordless; (col. 1, lines 30-39; col. 5, lines 44-66: Figure 6, #'s 500-518, the preference of the systems is based on the cost of the communication via the systems, thus, selecting the least expensive one; col. 4, lines 41-45, the user activates the phone).

What Gillig does not explicitly disclose is conversion circuitry for converting an analog voice stream to digital voice data and for converting digital voice data to an analog voice stream for the reproduction of voice.

Davis discloses conversion means to convert analog signals into digital signals (col. 6, lines 11-25).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that converting an analog voice stream to digital voice data and for converting digital voice data to an analog voice stream for the reproduction of voice, to provide means of acquiring voice and provide voice control over the medium.

Regarding claim 71, the combination discloses claim 70 wherein the mode of communication comprises one of voice, data, and voice and data (Gillig, Figure 2, # 164; col. 2, lines 61-66, provide the cellular telephone with a microphone, which can accept voice, thus signals representative of voice).

Regarding claim 72, the combination discloses claim 70 further comprising: a buffer for buffering digital voice data, the processing circuit directing delivery of the buffered digital voice data to the conversion circuitry after a delay that is adjustable by the processing circuit to accommodate variations in propagation delays over a communication network (Davis, col. 5, lines 1-10, 6—67-col. 6, lines 1-44).

12. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillig and Davis in view of Fishbine et al. (US005222152A).

Regarding claim 73, the combination discloses 70, but an image capture device for generating data for transmission.

Fishbine discloses a device that captures images and scans and records fingerprint images and includes video camera (Figure 1, #'s 28, 18, 20; col. 2, lines 64-67-col. 3, lines 1-36).

It would have been obvious to one of skilled in thee art at the time of the invention to modify Gillig, such that at least one image capture device, a thumbprint capture device, or a video capture device be included in the device, to provide means to record images and video of objects as well as fingerprint images.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIO R. PEREZ whose telephone number is (571)272-7846. The examiner can normally be reached on 10:30 - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Julio R Perez/
Examiner, Art Unit 2617

5/21/08

/Duc Nguyen/
Supervisory Patent Examiner, Art Unit 2617